Remarks/Arguments

The Office Action of June 15, 2003 and the references cited therein have been carefully studied and reviewed, and in view of the foregoing Amendment and following representations, reconsideration is respectfully requested.

Claim 6 has been amended and new claim 10 has been added so as to more clearly patentably distinguish the present invention over the references to Strodtbeck et al. (USP 6,403,933) and Kyung et al. (USP 5,778,969).

More specifically, one object of the present invention is to provide a method of heat-treating a wafer such that the distribution of surface temperatures of the wafer corresponds to a desired distribution of surface temperatures, i.e. to a surface temperature distribution **determined in advance of the heat treatment**. (Refer to page 4, lines 2-5 of Applicant's original specification). Accordingly, a plurality of temperature-conditioning apparatuses can be used in parallel and yet, provide nearly the same surface temperature distribution. (Page 6, lines 24 – 27, and 28+)

To this end, i.e., to pre-determine a desired distribution of surface temperatures for a wafer, the present invention as recited in amended claim 6 comprises a step of **determining temperatures at different locations across the surface of a wafer** before a wafer is temperature-conditioned. Likewise, new claim 10 calls for a step of measuring the temperatures at different locations across the surface of a wafer after the wafer is temperature-conditioned in a reference temperature-conditioning apparatus (e.g., a first bake unit as described at page 6, line 30 – page 7, line 2 of the

specification), but before a plurality of wafers are temperature-conditioned in respective apparatuses disposed in parallel.

Then, the wafer(s) are set above a heat transfer plate(s) with a spacing and inclination selected so that the temperature-conditioning process produces the predetermined desired temperature distribution.

Strodtbeck et al. only disclose a method wherein a wafer is raised by support pins 60 above the surface of a heat transfer plate 12 during a temperature-conditioning process (col. 9, lines 20 – 53). The wafer is temperature-conditioned according to whatever characteristic the heat-treating apparatus possesses when the support pins 60 are in their set raised position. There is no mention in Strodtbeck et al. of adjusting the pins 60 to achieve any predetermined surface temperature distribution for the wafer.

That is, Strodtbeck et al. disclose nothing corresponding to the above-described steps of Applicant's claims 6 and 10 of measuring or otherwise determining temperatures at different locations across the surface of a wafer before the temperature-conditioning process is carried out.

Kyung et al. also fail to disclose anything related to the adjusting of the spacing and/or inclination of a wafer relative to a heat transfer plate in order to achieve a desired pre-determined temperature surface distribution. Kyung et al. only teach that the upper surface of the heat transfer plate 20b itself may have an inclination at 20c to allow for gas to be supplied between the plate 20b and the bottom of a wafer (col. 4, lines 57 – 65).

In other wards, the references fail to disclose or suggest using a surface temperature distribution, that is a characteristic of a temperature-conditioning process, to select the spacing and inclination of a wafer relative to a heat transfer plate used to carry out such a process. Thus, the references do not render Applicant's claims obvious under 35 USC 103. Accordingly, early reconsideration and allowance of the claims are respectfully requested.

Respectfully submitted,
VOLENTINE FRANCOS, PLLC

By: Reg No 33289
Michael Stone
FOR: Reg. No. 32,442

VOLENTINE FRANCOS, PLLC
12200 Sunrise Valley Drive, Suite 150
Reston, VA 20191
(703) 715-0870

Date: December 19, 2003